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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/643,215 | 08/18/2003 | Vincent K. Jones | 021245-001300US | 4013 |
| 20350 | 7590 | 05/29/2007 | EXAMINER | |
| TOWNSEND AND TOWNSEND AND CREW, LLP | | | ETTEHADIEH, ASLAN | |
| TWO EMBARCADERO CENTER | | | ART UNIT | PAPER NUMBER |
| EIGHTH FLOOR | | | 2611 | |
| SAN FRANCISCO, CA 94111-3834 | | | MAIL DATE | DELIVERY MODE |
| | | | 05/29/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/643,215 | JONES ET AL. |
| | Examiner | Art Unit |
| | Aslan Ettehadieh | 2611 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 April 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's addition of claims 14 – 24 in the reply filed on 04/27/2007 is acknowledged. Claims 14 – 24 are now added. Office action address claims 1 – 24.

Response to Arguments

2. Applicant's arguments filed 04/27/2007 have been fully considered but they are not persuasive.

3. Applicant's arguments regarding claims 1 – 13, Keaney, Lin, nor Rios teach *transmitting upstream data from a client device to an access point using a first protocol and the access point transmitting downstream data to the client device using a second protocol in response to the access point receiving the upstream data from the client device*. Contrary to applicant's assertion, Keaney discloses transmitting upstream data from the client device using an 802.11b protocol (figure 1, figure 3 elements 346, 342, col. col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16); receiving the upstream data at the access point (col. 1 lines 8 – 19, col. 2 lines 38 – 40, col. 13 lines 12 – 16; where in a network nodes communicate among nodes and Keaney's nodes can be client devices and/or access points, and therefore one node being a client device and the other being a access point and the two communicating with each other using the particulars disclosed in figure 3); transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (figure 1, figure 3 elements 345, 341, col. col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16). Further Keaney's communications transmitted from the client to

the access point is being interpreted as upstream communications and Keaney's communications transmitted from the access point to the client is being interpreted as downstream communications. Lin discloses transmitting upstream data from the client device using an 802.11b protocol (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9; where access device is being interpreted as access point and where the device under client mode is being interpreted as a client device); receiving the upstream data at the client device (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9); transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9); and receiving the downstream data at the client device (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9). Further Lin's communications transmitted from the client to the access point is being interpreted as upstream communications and Lin's communications transmitted from the access point to the client is being interpreted as downstream communications. Rios discloses transmitting upstream data from the client device using an 802.11b protocol (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115); receiving the upstream data at the client device (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115); transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115); and receiving the downstream data at the client device (abstract,

paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115). Further Rios's communications transmitted from the client to the access point is being interpreted as upstream communications and Rios's communications transmitted from the access point to the client is being interpreted as downstream communications.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 – 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14 – 32 of copending Application No. 10/809559. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one skilled in the art at the time of the invention was made to have logic for routing between a client and a client module in order to properly transmit data among the

system. Also, a first and second modulation is being interpreted as including 802.11 and OFDM modulation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 13 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Keaney et al. (US 7062703).

6. Regarding claims 13 and 24, Keaney discloses a method of wireless communication between a client device and an access point, wherein a client device is a wireless network station that is portable, mobile or portable and mobile, the method comprising:

transmitting upstream data from the client device using an 802.11b protocol (figure 1, figure 3 elements 346, 342, col. col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

receiving the upstream data at the access point (col. 1 lines 8 – 19, col. 2 lines 38 – 40, col. 13 lines 12 – 16; where in a network nodes communicate among nodes and Keaney's nodes can be client devices and/or access points, and therefore one node being a client device and the other being a access point and the two communicating with each other using the particulars disclosed in figure 3);

transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (figure 1, figure 3 elements 345, 341, col. col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16); and

receiving the downstream data at the client device (col. 1 lines 8 – 19, col. 2 lines 38 – 40, col. 13 lines 12 – 16; where in a network nodes communicate among nodes and Keaney's nodes can be client devices and/or access points, and therefore one node being a client device and the other being a access pint and the two communicating with each other using the particulars disclosed in figure 3).

7. Claims 13 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Rios (US 2004/0125775).

8. Regarding claims 13 and 24, Rios discloses a method of wireless communication between a client device and an access point, wherein a client device is a wireless network station that is portable, mobile or portable and mobile, the method comprising:

transmitting upstream data from the client device using an 802.11b protocol (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115);

receiving the upstream data at the client device (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115);

transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115); and

receiving the downstream data at the client device (abstract, paragraphs 11 – 13, 26 – 28, 73, 74, figure 1 elements 109, 111, 112, 115).

9. Claims 13 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US 6725015).

10. Regarding claims 13 and 24, Lin discloses a method of wireless communication between a client device and an access point, wherein a client device is a wireless network station that is portable, mobile or portable and mobile, the method comprising:

transmitting upstream data from the client device using an 802.11b protocol (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9; where access device is being interpreted as access point and where the device under client mode is being interpreted as a client device);

receiving the upstream data at the client device (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9);

transmitting downstream data from the access point using an 802.11g protocol in response to receiving the upstream data at the access point (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9); and

receiving the downstream data at the client device (figures 1, 4, col. 1 lines 11 – 43, col. 2 lines 21 – 24, 31 – 35, 63 – 67, col. 3 lines 5 – 9).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keaney et al. (US 7062703) in view of Rois (2004/0125775).

12. Regarding claim 1, Keaney discloses a client wireless module, for handling communications to and from an access point wireless module, comprising:

an 802.11b processing section, for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal (figure 1, figure 3 element 346, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

an OFDM processing section, for processing at least a representation of a receive signal from the access point wireless module into receive data (figure 1, figure 3 element 341, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

at least one transmit antenna, coupled to the 802.11b processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28); and

at least one receive antenna, coupled to the OFDM processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28).

Also, Keaney discloses the client wireless module (col. 13 lines 12 – 16; where an access point and a client device can be used interchangeably). Keaney does not explicitly disclose logic for routing information between a client and the client wireless

module, however, Keaney discloses status information (col. 6 lines 20 – 31) where status information is known to be used for routing information/decision processes.

In the same field of endeavor, however, Rois discloses logic for routing information between a client and the client wireless module (figure 2, paragraphs 32 – 40, 23). Rois also discloses an 802.11b processing section, for processing at least data to be transmitted to the access point into representations of a transmit signal; an OFDM processing section, for processing at least a representation of a receive signal from the access point into receive data; at least one transmit antenna, coupled to the 802.11b processing section; at least one receive antenna, coupled to the OFDM processing section (figure 1 elements 109, 111, 112, 115, paragraphs 11 – 13, 26 – 28).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use logic for routing information between a client and the client wireless module as taught by Rois in the system of Keaney to readily reduce data flow (paragraph 35).

13. Regarding claim 2, Keaney further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 1 element 111a-b, 112a-b, 115a-b).

14. Regarding claim 3, Keaney further discloses at least one receive antenna comprises a plurality of receive antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one receive antenna comprises a plurality of receive antennas (figure 1 element 111a-b, 112a-b, 115a-b).

15. Regarding claim 4, Keaney discloses a client wireless module, for handling communications to and from an access point wireless module, comprising:

an OFDM processing section, for processing at least data to be transmitted to the access point wireless module into representations of a transmit signal (figure 1, figure 3 element 345, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

an 802.11b processing section, for processing at least a representation of a receive signal from the access point wireless module into receive data (figure 1, figure 3 element 342, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

at least one transmit antenna, coupled to the OFDM processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28); and

at least one receive antenna, coupled to the 802.11b processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28).

Also, Keaney discloses the client wireless module (col. 13 lines 12 – 16; where an access point and a client device can be used interchangeably). Keaney does not explicitly disclose logic for routing information between a client and the client wireless module, however, Keaney discloses status information (col. 6 lines 20 – 31) where status information is known to be used for routing information/decision processes.

In the same field of endeavor, however, Rois discloses logic for routing information between a client and the client wireless module (figure 2, paragraphs 32 – 40, 23). Rois also discloses an 802.11b processing section, for processing at least data to be transmitted to the access point into representations of a transmit signal; an OFDM processing section, for processing at least a representation of a receive signal from the

access point into receive data; at least one transmit antenna, coupled to the 802.11b processing section; at least one receive antenna, coupled to the OFDM processing section (figure 1 elements 109, 111, 112, 115, paragraphs 11 – 13, 26 – 28).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use logic for routing information between a client and the client wireless module as taught by Rois in the system of Keaney to readily reduce data flow (paragraph 35).

16. Regarding claim 5, Keaney further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 1 element 111a-b, 112a-b, 115a-b).

17. Regarding claim 6, Keaney further discloses at least one receive antenna comprises a plurality of receive antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one receive antenna comprises a plurality of receive antennas (figure 1 element 111a-b, 112a-b, 115a-b).

18. Regarding claim 7, Keaney discloses an access point wireless module, for handling communications to and from a client wireless module, comprising:

an 802.11b processing section, for processing at least data to be transmitted to the client wireless module into representations of a transmit signal (figure 1, figure 3 element 346, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

an 802.11g processing section, for processing at least a representation of a receive signal from the client wireless module into receive data (figure 1, figure 3 element 341, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16); at least one transmit antenna, coupled to the 802.11b processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28); and at least one receive antenna, coupled to the 802.11g processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28).

Also, Keaney discloses the access point wireless module (col. 13 lines 12 – 16). Keaney does not explicitly disclose logic for routing information between an access point and the access point wireless module, however, Keaney discloses status information (col. 6 lines 20 – 31) where status information is known to be used for routing information/decision processes.

In the same field of endeavor, however, Rois logic for routing information between an access point and the access point wireless module (figure 2, paragraphs 32 – 40, 23). Rois also discloses an 802.11b processing section, for processing at least data to be transmitted to the client into representations of a transmit signal; an 802.11g processing section, for processing at least a representation of a receive signal from the client into receive data; at least one transmit antenna, coupled to the 802.11b processing section; at least one receive antenna, coupled to the 802.11g processing section (figure 1 elements 109, 111, 112, 115, paragraphs 11 – 13, 26 – 28).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use logic for routing information between an access point and

the access point wireless module as taught by Rois in the system of Keaney to readily reduce data flow (paragraph 35).

19. Regarding claim 8, Keaney further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 1 element 111a-b, 112a-b, 115a-b).

20. Regarding claim 9, Keaney further discloses at least one receive antenna comprises a plurality of receive antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one receive antenna comprises a plurality of receive antennas (figure 1 element 111a-b, 112a-b, 115a-b).

21. Regarding claim 10, Keaney discloses an access point wireless module, for handling communications to and from a client wireless module, comprising:

an 802.11g processing section, for processing at least data to be transmitted to the client wireless module into representations of a transmit signal (figure 1, figure 3 element 345, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

an 802.11b processing section, for processing at least a representation of a receive signal from the client wireless module into receive data (figure 1, figure 3 element 342, col. 1 lines 7 – 18, col. 2 lines 38 – 40, col. 13 lines 12 – 16);

at least one transmit antenna, coupled to the 802.11g processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28); and

at least one receive antenna, coupled to the 802.11b processing section (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28).

Also, Keaney discloses the access point wireless module (col. 13 lines 12 – 16). Keaney does not explicitly disclose logic for routing information between an access point and the access point wireless module, however, Keaney discloses status information (col. 6 lines 20 – 31) where status information is known to be used for routing information/decision processes.

In the same field of endeavor, however, Rois logic for routing information between an access point and the access point wireless module (figure 2, paragraphs 32 – 40, 23). Rois also discloses an 802.11b processing section, for processing at least data to be transmitted to the client into representations of a transmit signal; an 802.11g processing section, for processing at least a representation of a receive signal from the client into receive data; at least one transmit antenna, coupled to the 802.11b processing section; at least one receive antenna, coupled to the 802.11g processing section (figure 1 elements 109, 111, 112, 115, paragraphs 11 – 13, 26 – 28).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use logic for routing information between an access point and the access point wireless module as taught by Rois in the system of Keaney to readily reduce data flow (paragraph 35).

22. Regarding claim 11, Keaney further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one transmit antenna comprises a plurality of transmit antennas (figure 1 element 111a-b, 112a-b, 115a-b).

23. Regarding claim 12, Keaney further discloses at least one receive antenna comprises a plurality of receive antennas (figure 3, figure 1, 102 – 104, col. 3 lines 51 – 55, col. 4 lines 26 – 28). Also, Rois further discloses at least one receive antenna comprises a plurality of receive antennas (figure 1 element 111a-b, 112a-b, 115a-b).

24. Claims 14, 17 – 19, 22 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keaney et al. (US 7062703) in view of Rois (2004/0125775) in further view of Arviv et al. (US 2003/0045307).

25. Regarding claim 1, Keaney in view of Rois discloses all limitations of claim 14 as analyzed in claims 1, 4 above, except wherein the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module.

In the same field of endeavor, however, Arviv discloses the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module (figure 1, paragraphs 29 – 31).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module as taught by Arviv in the system of Keaney to increase bandwidth utilization (paragraph 29).

26. Regarding claims 17 – 18, Keaney further discloses multiple Tx and multiple Rx antennas (col. 4 lines 26 – 34).

27. Regarding claim 19, Keaney in view of Rois discloses all limitations of claim 19 as analyzed in claims 7, 10 above, except wherein the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module.

In the same field of endeavor, however, Arviv discloses the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module (figure 1, paragraphs 29 – 31).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module as taught by Arviv in the system of Keaney to increase bandwidth utilization (paragraph 29).

28. Regarding claims 22 – 23, Keaney further discloses multiple Tx and multiple Rx antennas (col. 4 lines 26 – 34).

29. Claims 14, 17 – 19, 22 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keaney et al. (US 7062703) in view of Rois (2004/0125775) in further view of Onggosanusi et al. (US 2003/0210750).

30. Regarding claim 1, Keaney in view of Rois discloses all limitations of claim 14 as analyzed in claims 1, 4 above, except wherein the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module.

In the same field of endeavor, however, Onggosanusi discloses the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module (paragraph 152).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module as taught by Onggosanusi in the system of Keaney to maximize throughput (paragraph 152).

31. Regarding claims 17 – 18, Keaney further discloses multiple Tx and multiple Rx antennas (col. 4 lines 26 – 34) and Onggosanusi further discloses a MIMO system (abstract, figure 2).

32. Regarding claim 19, Keaney in view of Rois discloses all limitations of claim 19 as analyzed in claims 7, 10 above, except wherein the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module.

In the same field of endeavor, however, Onggosanusi discloses the first protocol and the second protocol are selected at least in part based upon on or more attributes

of the client wireless module and one or more attributes of the access point wireless module (paragraph 152).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use the first protocol and the second protocol are selected at least in part based upon on or more attributes of the client wireless module and one or more attributes of the access point wireless module as taught by Onggosanusi in the system of Keaney to maximize throughput (paragraph 152).

33. Regarding claims 17 – 18, Keaney further discloses multiple Tx and multiple Rx antennas (col. 4 lines 26 – 34) and Onggosanusi further discloses a MIMO system (abstract, figure 2).

Other prior art cited

The prior art made of record and not relies upon is considered pertinent to applicant's disclosure.

34. Proctor (US 2002/0013135) discloses relevance to newly added claims (paragraph 53).

Allowable Subject Matter

35. Claims 15 – 16 and 20 – 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aslan Ettehadieh whose telephone number is (571) 272-8729. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aslan Ettehadieh
Examiner
Art Unit 2611

AE

David Payne
DAVID C. PAYNE
SUPERVISORY PATENT EXAMINER